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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,856	12/15/2003	Robert Glenn Biskeborn	SJO920030003US1	5370

7590 10/23/2006

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EXAMINER

CAO, ALLEN T

ART UNIT PAPER NUMBER

2627

DATE MAILED: 10/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/736,856	Applicant(s) BISKEBORN ET AL.	
	Examiner Allen T. Cao	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
4a) Of the above claim(s) 10-17 and 22-29 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-4, 8 and 18-20 is/are rejected.
7) ☒ Claim(s) 5-7, 9 and 21 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. Applicant's election without traverse of Group I, claims 1-9 and 18-21 in the reply filed on 8/28/06 is acknowledged.

2. Claims 10-17 and 22-29 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected claims, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 8/28/06.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 8 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Biskeborn et al (US. 5,905,613).

Biskeborn et al inherently discloses a magnetic tape recorder system having a magnetic tape; a tape drive, a magnetic head, an actuator, and read/write channel as set forth in claim 18 (standard features for a magnetic tape recorder).

Biskeborn et al discloses a magnetic tape head having a first rowbar substrate having a transducing surface and a gap surface; a thin film transducer on the gap surface of the first rowbar substrate, said thin film transducer forming a portion of the transducing surface; and a first closure covering the thin film transducer on a side thereof opposite the gap surface of the first rowbar substrate and the first closure

forming a portion of the transducing surface (see throughout specification, claims and figures), as recited in claims 1, 8 and 18.

Biskeborn et al does not disclose that the thickness of the first closure layer is in the range of 0.1-200 microns as claimed in claims 1, 8 and 18.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to manufacture the first closure layer of the magnetic head of Biskeborn et al with a thickness in the range of 0.1-200 microns.

The rationale is as follows: One of ordinary skill in the art would have been motivated to manufacture the first closure layer of the magnetic head of Biskeborn et al with a thickness in the range of 0.1-200 microns through routine lab experiment and optimization to protect the surface of the transducer in order to provide a durable magnetic head. Additionally, it has been held that changes in size and shape of parts of an invention in the absence of an unexpected result involves routine skill in the art. See In re Dailey, 93 USPQ 47 (CCPA 1966).

Regarding claims 2-4 and 19-20, Biskeborn et al only discloses that the ceramic closure comprises of alumina and titanium carbide. Biskeborn does not disclose that the first closure is either made of "Al-Fe-Si", "Al-O-Ti-C", "Zr-O-Ti", "Si-N", "Si-C", and "Zr-O" (claims 2 and 19); deposited layer of Al-Fe-Si (claim 3); or a conductive layer (claims 4 and 20).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to manufacture the first closure of the magnetic of Biskeborn et al with such material as set forth, supra through a routine lab experiment in order to

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improve the read/write characteristics of the magnetic head. Additionally, it has been held to be within the general skill of a worker in the art to select a known material having different chemical bonding structures on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416 (CCPA 1960).

5. Claims 5-7, 9 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen T. Cao whose telephone number is (571) 272-7569. The examiner can normally be reached on Mon - Thurs (7:30 - 6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (571) 272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Allen Cao
Primary Examiner

AC
October 19, 2006